## **REMARKS**

## Notice of Non-Responsive Amendment

Applicant appreciates the holding of a bona-fide attempt to respond to the prior Office Action. The objection noted at the first paragraph 3 of the July 31, 2007 Office Action has been addressed herein by amendment to claim 21.

#### Objection to the Claims

Object claim 21 has been addressed via an amendment to cancel duplicative language. It is requested that this objection be withdrawn.

### Rejection in view of Halasa

Claim 1 stands rejected under 35 U.S.C. § 103 over Halasa.

In the office actions, it is held that Halasa's singular example of 2,3-difluorobutane meets Applicants recitation of an HFC diluent in the claimed polymerization process. In the present application, the HFC is recited as being the diluent for the polymerization process. Halasa discloses that the diluent for his polymerization process should be a hydrocarbon solvent – either a saturated aliphatic or cycloaliphatic compound (col 5, lines 48-60). In all of the examples provided, toluene serves as the diluent for the polymerization – not any HFC. Halasa fails miserably in teaching the use of HFC's as a diluent for any polymerization process.

In the present rejection, it is held that a polymerization temperature of less than zero degrees C would be obvious and one skilled in the art would be so motivated to use such lower temperatures. Applicants respectfully disagree. For all of the examples provided, Halasa discloses a polymerization temperature greater than 0° C, and the claims are also directed to temperatures greater than 5° C.

It is requested that this rejection be reconsidered and withdrawn.

# Nonstatutory Obviousness Type Double Patenting

A. All pending claims stand provisionally rejected over the claims of copending Application No. 10/539,013 for the reasons set forth in the June 2006 Office Action.

In the Notice of Non-responsive, it is noted that there is no corresponding provisional obviousness type double patenting rejection in copending Application No. 10/539,013, and thus applicants prior arguments are considered irrelevant to the present rejection.

In the Office Action of June 2006, all the pending claims of the present application were held obvious over all claims of the copending 10/539,013. While not identical, the claims of the present application were held to be "more broad than the copending claims," i.e. the claims are the present application are genus to the species claims of 10/539,013.

Based on the above explanation in the original rejection and for the reasons set forth below, it appears that the provisional obviousness double patenting (PODP) rejection should be revisited and reconsidered.

When the rejection was original made, the independent claim in this instant application was:

1. A polymerization process comprising contacting one or more monomer(s), one or more Lewis acid(s), and a diluent comprising one or more hydrofluorocarbon(s) (HFC's) in a reactor; wherein the one or more Lewis acid(s) is not a compound represented by formula  $MX_3$ , where M is a group 13 metal and X is a halogen.

While the independent claim in copending 10/539,013 was:

1. A polymerization process comprising contacting a catalyst system, a diluent comprising one or more hydrofluorocarbon(s) (HFC's), and one or more monomer(s) to form a polymerization medium, wherein the polymerization medium is evaporated during the polymerization and the polymerization process is a cationic polymerization process.

It appears to be questionable as to which claim, at the time the PODP was made, was actually the broader of the two: claim 1 of the instant application recites that the use of a Lewis acid and limits the structure of the Lewis acid while claim 1 of 10/539,013 recites a cationic polymerization process and evaporation of the medium. Furthermore, the invention of original claim 1 of the present invention might be practiced without evaporation of the polymerization medium during polymerization and the invention of claim 1 of 10/539,013 might be practiced with the specifically excluded Lewis acid of original claim 1 of the present application.

To meet the requirements of a genus/species type argument as set forth in the June 2006 PODP rejection, and to maintain this rejection, practice of the invention of the claims of 10/539,013 must meet all the limitations of the claims of the present application.

Due to amendments made in the present application, the genus/species argument is truly no longer applicable. Claim 1 of the present application now recites the following elements: not less than 15% HFC in the diluent mixture, a polymerization temperature, a pressure, and a specific Lewis acid. Claim 1 of the present application is no longer broader than claim 1 of the copending 10/539,013.

A review of independent claims 28 - 32 of the present application also shows elements not recited by claim 1 of 10/539,013: not less than 5% HFC in the diluent, a polymerization temperature, polymerization pressure, specific Lewis acid metals, and other specific materials to be included, usually as an initiator. Independent claim 59 also included many of these elements not included in claim 1 of 10/539,013.

Claim 1 of 10/539,013 (the sole independent claim in that application) fails to be a species claim to any independent claim of the present application. Furthermore, as noted above, the claims of copending 10/539,013 requires evaporation of the polymerization medium during polymerization, still rendering the inventions distinct from one another. While the failure of the present application to recite this limitation arguably makes the claim open to this limitation, the amendments made to the claims of the present application clearly remove the "genus" status of the present claims to those of 10/539,013.

It is requested that this rejection be reconsidered and withdrawn in light of the amendments made to the claims during the course of prosecution.

B. All pending claims stand rejected on the grounds of nonstatutory obviousness type double patenting over US 7,232,872.

Enclosed with the Amendment of October 10, 2007, a terminal disclaimer was filed to disclaim any portion of a patent that may issue from the present application beyond the expiration date of the co-owned US 7,232,872.

A review of the USPTO PAIR records shows that the TD was approved on December 27, 2007.

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Thus, it is presumed that in the next Office Action this rejection will be noted as withdrawn.

In view of the above amendments and remarks it is respectfully submitted that this application is in condition for allowance. Prompt notice of such is respectfully solicited.

Please charge any deficiency in fees or credit any overpayments during the entire pendency of this case to Deposit Account No. 05-1712.

Applicants invite the Examiner to telephone the undersigned attorney, if there are any issues outstanding which have not been presented to the Examiner's satisfaction.

Respectfully submitted,

January 17, 2008

Date:

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